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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,125	12/07/2001	Jong-Woo Kim	8733.067.10	1111

7590

12/04/2002

Long Aldridge & Norman LLP  
701 Pennsylvania Avenue N W  
Suite 600  
Washington, DC 20004

EXAMINER

SCHILLINGER, LAURA M

ART UNIT

PAPER NUMBER

2813

DATE MAILED: 12/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/005,125

Applicant(s)

KIM, JONG-WOO

Examiner

Laura M Schillinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 12-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

**This Office Action addresses the Response filed 9/19/02, in Paper No.6.**

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 12-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Terasaka et al ('492).

In reference to claim 12, Terasaka teaches a method comprising:

Providing a substrate (Fig.2 (18));

Fabricating a plurality of lines over the substrate, each line having a pad (Col.1, lines: 40-45 and Col.2, lines: 1-25 see also Fig.5 (50)

Forming a first layer above the substrate to cover at least a portion of the substrate (Fig.5 (48)), wherein the first layer exposes the pad of the each line and defines at least one opening near the pad (openings are found between pads 50- note that adhesive 54 is added to fill the opening between pads after 48 is joined to pad 50- Col.4, lines: 50-60); and

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Forming a second layer having a first part (28 or 46') and second part (54 or 32), wherein the first part is affixed to the pad (28 and 46' (40 which is part of layer 46') are in pressure-contact with pad 50) provide an electrical signal to the line and the second part is affixed to a bottom surface of the opening defined in the first layer to enhance adhesion between the first and second layers (the adhesive is formed within the opening).

In reference to claim 13, Terasaka teaches wherein the first part of the second layer is a conductive portion and the second part is an insulating portion (Col.1, lines: 20-25).

In reference to claim 14, Terasaka teaches further including:

Forming a third layer between the second and the first layer, wherein the third layer affixes the first part to the pad and the second part to the substrate through at least one opening defined in the first layer (Fig.2 (24)).

In reference to claim 15, Terasaka teaches further including:

Forming a third layer disposed between the second and first layer, wherein the third layer affixes the conductive portion to the pad and the insulating portion to the substrate through the at least one opening defined in the first layer (Fig.2 (24)).

In reference to claim 16, Terasaka teaches wherein the second layer is a TCP (Col.1, lines: 60-68).

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In reference to claim 17, Terasaka teaches wherein the third layer is ACF(Col.1, lines: 60-68).

In reference to claim 18, Terasaka teaches wherein the at least one opening defined in the first layer is fabricated to extend to the substrate (Fig.2 (34)).

In reference to claim 19, Terasaka teaches wherein the first layer defines a plurality of openings for securing the second layer above the first (Fig.2 (34)).

In reference to claim 20, Terasaka teaches further including:

Forming a third layer between the second and the first where in the third layer affixes the first part to the pad and the second part to the substrate through at least one opening defined in the first layer (Fig.2 (24)).

### ***Response to Arguments***

Applicant's arguments with respect to claim 12 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M Schillinger whose telephone number is (703) 308-6425. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W Whitehead, Jr. can be reached on (703) 308-4940. The fax phone numbers

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for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1500.

LMS

December 1, 2002

  
CARL WHITEHEAD, JR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800